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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,366	01/25/2002	Johannes M.M. Verbakel	PHQ 98,017A	8305

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EXAMINER

CHU, KIM KWOK

ART UNIT	PAPER NUMBER
2653	

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/056,366	VERBAKEL ET AL.
	Examiner Kim-Kwok CHU	Art Unit 2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on Pre-amendment filed on 1/25/02.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 10-35 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 10-19,22,23,25,27,29,31,33 and 35 is/are rejected.

7) Claim(s) 20,21,24,26,28,30,32 and 34 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. 09/328,024.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.

4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

2. Claims 10-19, 22, 23, 25, 27 29, 31, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishida et al. (U.S. Patent 5,384,678) in view of Yonemitsu et al. (U.S. Patent 5,592,450).

Nishida teaches a method for producing a storage medium very similar to that of the instant invention. For example, Nishida teaches the following steps:

- (a) as in claim 10, providing a sub-TOC in one or more track areas of a unitary storage medium (Fig. 2);
- (b) as in claim 10, the sub-TOC having a structure for storing information for determining the configuration of the items stored in the track area (Fig. 2);
- (c) as in claim 10, providing at least one master-TOC having structures for storing information for determining the position of the sub-TOCs (Fig. 2);

(d) as in claim 11, storing the information items in the track area (Fig. 2);

(e) as in claim 11, storing in each of the sub-TOC structures the configuration of each of the information items including the content and position of the information items in the track area (Fig. 2);

(f) as in claim 11, storing in the master-TOC structures the information for determining the position of the sub-TOCs (Fig. 2; sub-TOCs are located in each chapter);

(g) as in claim 12, the information items include audio information (Fig. 2); and

(h) as in claim 18, the master-TOC is positioned at a predetermined offset location with respect to an initial location on the medium (Fig. 2).

However, Nishida does not teach the following:

(a) as in claim 10, providing an additional mutually logically conforming sub-TOC for the same track area in one or more track areas of a unitary storage medium;

(b) as in claim 10, the additional sub-TOC having structures for storing information for determining the configuration of the same information items stored in the track area, thereby allowing retrieving the configuration of the same information item in the track area from at least any correct copy of the sub-TOCs;

- (c) as in claim 13, the unitary storage medium is an optical disc;
- (d) as in claim 14, the information is stored by pressing consumer discs from a master disc;
- (e) as in claim 15, the information is stored using an optical write head;
- (f) as in claim 16, two sub-TOC assigned to the track area are positioned at opposite ends of the track area;
- (g) as in claim 17, the number of sub-TOCs assigned to the track area is exactly 2; and
- (h) as in claim 19, the mutually logically sub-TOCs are identical.

Yonemitsu teaches a recording medium having the following:

- (a) as in claim 10, providing an additional mutually logically conforming TOCs in a unitary storage medium (Fig. 5);
- (b) as in claim 10, the additional TOC having structures for storing information for determining the configuration of the same information items stored in the track area, thereby allowing retrieving the configuration of the same information item in the track area from at least any correct copy of the TOCs (Fig. 5);
- (c) as in claim 13, the unitary storage medium is an optical disc (Fig. 2);

(d) as in claim 14, the information is stored by pressing consumer discs from a master disc (Fig. 2, the disc is a CD-ROM which is manufactured by pressing process); and

(e) as in claim 15, the information is stored using an optical write head (Fig. 2; the disc is a WORM, column 13, liens 43-46).

Refer to the feature not taught by Nishida in claims 10, 17 and 19: There is an advantage of duplicating a TOC file in the event the original TOC file cannot be read. For example, Yonemitsu's file structure has a copy of the TOC file as redundant TOC information. Hence, it would have been obvious to one of ordinary skill in the art at the time of invention to make an additional TOC file such as Nishida's chapter 2 TOC file within the chapter similar to Yonemitsu's, because the extra TOC information in the same chapter/track area can protect the TOC file when any part of it cannot be read properly. And since the Chapter 2 TOC file of Nishida's is a sub-TOC file, its copy is also a sub-TOC file as in Applicant's claim 10. Furthermore, Nishida's chapter 2 has two identical sub-TOC files as in Applicant's claims 17 and 19.

Refer to the features not taught by Nishida in claims 13-15: Although Nishida does not teach that his recording medium is an optical disk, for the advantage of recording capacity, it would have been obvious to one of ordinary skill in the art to

use an optical medium such as Yonemitsu's, because an optical recording medium such as a CD-ROM, WORM etc. can be manufactured in a large volume quickly by a pressing process. Furthermore, the Yonemitsu's optical recording medium can be written with user information and the medium's content can be searched instantly.

Refer to the features not taught by Nishida in view of Yonemitsu in claim 16: Although Yonemitsu does not specify his copy of TOC file can be located at the end of a track area, for the benefit of better file management, it is easier to access at the end of a track. Hence, for the location of the copy TOC file, it would have been obvious to one of ordinary skill in the art to place it at the end of a track similar to Applicant's instead of other locations such as Yonemitsu's, because the end of the track has a definite address which can be accessed easily without an additional step of searching it's location.

3. Apparatus claims 22 and 23 are drawn to the apparatus corresponding to the method of using the same as claimed in claims 10, 11 and 13. Therefore apparatus claims 22 and 23 correspond to method claims 10, 11 and 13, and are rejected for the same reasons of anticipation (obviousness) as used above.

4. Apparatus claim 25 is drawn to the apparatus corresponding to the method of using the same as claimed in claims 10, 11 and 13. Therefore apparatus claim 25 corresponds to method claims 10, 11 and 13 is rejected for the same reasons of anticipation (obviousness) as used above. Claim 25 however also recites the following limitations which is taught in the combination of Nishida in view of Yonemitsu:

(a) a first control means for positioning a read head for reading information items stored in a track area (read head positioning means such as Yonemitsu's disc drive 225 and system controller 230 in Fig. 2); and

(b) a second control means for positioning a read head for reading sub-TOC depending on position information read from at least one master-TOC (read head sector positioning means such as Yonemitsu's disc drive 225 and system controller 230 in Fig. 2).

5. Apparatus claim 27 is drawn to the apparatus corresponding to the method of using the same as claimed in claims 10, 11 and 13. Therefore apparatus claim 27 corresponds to method claims 10, 11 and 13 is rejected for the same reasons of anticipation (obviousness) as used above. Claim 27 however also recites the following limitations which is taught in the combination of Nishida in view of Yonemitsu:

- (a) a first control means for positioning a write head to write information items stored in a track area (write head positioning means such as Nishida's step S13 in Fig. 3); and
- (b) a second control means for positioning a write head to write configuration information (chapter write positioning means such as Nishida's step S13 in Fig. 3).

6. Apparatus claims 29 and 33 are drawn to the apparatus corresponding to the method of using the same as claimed in claims 10, 11 and 13. Therefore apparatus claims 29 and 33 correspond to method claims 10, 11 and 13, and are rejected for the same reasons of anticipation (obviousness) as used above. Claims 29 and 33 however also recites the following limitations which is taught in the combination of Nishida in view of Yonemitsu:

- (a) a read/write head (read/write head 212 as in Yonemitsu's Fig. 2); and
- (b) a disc driver (disc driver 225 as in Yonemitsu's Fig. 2);
- (c) a read/write head position controlling means (disc driver 225 and pickup controller 230 as in Yonemitsu's Fig. 2); and

(d) a disc clamping device for holding the disc (disc holder is an inherently device for secure the moving disc as in Yonemitsu's Fig. 2).

7. Apparatus claim 31 is drawn to the apparatus corresponding to the method of using the same as claimed in claims 10, 11, 13 and 14. Therefore apparatus claim 31 corresponds to method claims 10, 11, 13 and 14, and is rejected for the same reasons of anticipation (obviousness) as used above. Claim 31 however also recites the following limitation which is taught in the combination of Nishida in view of Yonemitsu:

(a) a mast disc and pressing means (Fig. 1 of Yonemitsu illustrates an optical disc mastering process).

8. Apparatus claim 35 is drawn to the apparatus corresponding to the method of using the same as claimed in claims 10, 11, and 13. Therefore apparatus claim 35 corresponds to method claims 10, 11 and 13, and is rejected for the same reasons of anticipation (obviousness) as used above. Claim 35 however also recites the following limitation which is taught in the reference of Nishida in view of Yonemitsu:

(a) a TOC mechanism (device 223 in Fig. 2 of Yonemitsu).

***Allowable Subject Matter***

9. Claims 20, 21, 24, 26, 28, 30, 32 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claims 20, 21, 24, 26, 28, 30, 32 and 34, the prior art of record fails to teach or fairly suggest that the information in the mutually logically conforming sub-TOCs is a bitwise inversion of a select identical information.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Maeda. (6,275,457) is pertinent because Maeda teaches a data zone having a master TOC and 2 sub-TOC areas.

Yokota (5,754,521) is pertinent because Yokota teaches a recording medium having a plurality of TOC areas.

12. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C.  
20231 or faxed to:

(703) 308-6306, (for formal communications intended for entry) or:

(703) 308-6306, (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (703) 305-3032.

KK 11/19/02

Kim-kwok CHU  
Examiner AU2651  
November 19, 2002

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